

REMARKS

Claims 3-16, 27, and 28 were pending, all of which were rejected. Claim 7 has been amended.

Drawings

The proposed drawing corrections January 10, 2003, were approved. New corrected drawings are still required. Attached hereto are two replacement sheets for sheets 1/5 and 3/5, which include Fig. 1 and Figs. 3 and 4, respectively.

Claim Objections

Claim 7 was objected to as containing informalities. Correction has been made.

Claim Rejections – 35 U.S.C. §103

Claims 3, 5, 9, 10, and 13-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wack et al. (6,673,637) (“Wack”) in view of Reiley (5,519,493) (“Reiley”) and Scheiner et al. (6,100,985) (“Scheiner”). Reconsideration is respectfully requested.

Attached hereto is a Declaration Pursuant to 37 C.F.R. §1.131 by the undersigned, and accompanying exhibit, that shows the conception of the subject matter of Claims 3-16, 27, and 28 prior to the effective priority date of Wack, which is September 20, 2000. Moreover, the attached Declaration shows that there was diligence between the effective priority date of Wack and the constructive reduction to practice of the present application. Accordingly, Wack should be removed as prior art.

In addition, Applicants note that optical element #52 in Wack is described as “a quarter wave plate, a collimator and a focusing lens.” Col. 38, lines 59-61. Applicants’ attorney is not aware of Wack teaching or suggesting that optical element #52 is a polarizing element as suggested by the Examiner. As is well known, a quarter wave plate may change the polarization state of polarized light, but does not itself polarize light. Thus, replacement of Wack’s optical elements #48 and #52 with Reiley’s elements #10 and #11 would be non-obvious, particularly because the elements are non-analogous.

Further, Applicants point out that Reiley teaches the use of a separate and distinct polarization state generator 11 and polarization state analyzer 10. The arrangement is

described in Reiley, as “the polarization state generator is mounted in a hole in the polarization state analyzer.” Col. 5, lines 26-29. Thus, Reiley uses two separate elements as the polarizer and analyzer. The “light from the light source 14 … passes through the polarizing state generator 11” toward the sample. Col. 5, lines 59-63. The “light then is scattered off the sample” and “then passes through polarization state analyzer 10”. Col. 5, line 66 to Col. 6, line 2.

Independent Claim 3, on the other hand, recites a single “polarizing element” through which the radiation passes through “toward said sample” and through which the reflected radiation from the sample passes. Reiley fails to disclose or suggest such an element. Thus, taken separately or together, Wack and Reiley fail to disclose all the elements in Claim 3. Moreover, Scheiner does not make up for the deficiencies of Wack and Reiley.

Independent Claim 13 recites “passing broadband radiation through a polarizing element” and “analyzing the reflected radiation with said polarizing element”. As discussed above, Reiley fails to teach or suggest this.

Accordingly, Applicants submit that for at least the reasons stated above, independent Claims 3 and 13 are allowable. Claims 5, 9 and 10 depend from Claim 3 and Claims 14 and 15 depend from Claim 13, and thus, Claims 5, 9, 10, 14 and 15 are allowable for at least the same reasons as Claims 3 and 13. Reconsideration and withdrawal of the rejection is respectfully requested.

Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over Wack in view of Reiley and Scheiner and further in view of Solomon et al. (5,900,633) (“Solomon”). Reconsideration is respectfully requested.

Claim 4 is dependent on Claim 3 and is allowable for at least the same reasons. Solomon does not remedy the defects of the cited art.

Accordingly, Applicants respectfully submit that Claim 4 is allowable and request reconsideration and withdrawal of the above rejection.

Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Wack in view of Reiley and Scheiner and further in view of Xu et al. (5,900,633) (“Xu”). Applicants note that the Examiner incorrectly cited Xu as having Patent No. 5,900,633. Applicants understand the rejection to be over Xu and not Patent No. 5,900,633. If the Examiner’s

intention was otherwise, clarification of the rejection is requested. Reconsideration of this rejection is respectfully requested.

Claim 6 depends from Claim 3, and thus is allowable for at least the same reasons as Claim 3. Xu does not remedy the defects of the cited art discussed above.

Accordingly, Applicants respectfully submit that Claim 6 is allowable and request reconsideration and withdrawal of the above rejection.

Claims 7 and 8 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wack in view of Reiley and Scheiner and further in view of Motulsky (“Analyzing Data with GraphPad Prism”) (“Motulsky”). Reconsideration is respectfully requested.

Similar to Claim 3, Claim 7 recites a single “polarizing element” through which the radiation passes through “toward said sample” and through which the reflected radiation from the sample passes. As discussed above, Reiley fails to disclose or suggest such an element and Scheiner does not make up for this deficiency. Moreover, Motulsky fails to make up for this deficiency.

Additionally, Applicants point out that Motulsky merely discloses a well known mathematical technique of nonlinear regression. Motulsky does not disclose or suggest “curve fitting said sample reflectance for said plurality of wavelengths and said plurality of orientations with $R(\Theta) = A \cdot \cos^4(\phi - \Theta) + B \cdot \sin^4(\phi - \Theta) + C \cdot \cos^2(\phi - \Theta) \cdot \sin^2(\phi - \Theta)$ ” as recited in Claim 7.

Accordingly, Claim 7 is patentable over the cited art for at least the reasons discussed above. Claim 8 depends from Claim 7 is therefore patentable for at least the same reasons.

Claim 11, 12, 16, 27, and 28 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wack in view of Reiley and Scheiner and further in view of Kuni et al. (4,647,196) (“Kuni”). Reconsideration is respectfully requested.

Both independent Claims 11 and 12 recites a single “polarizing element” through which the radiation passes through “toward said sample” and through which the reflected radiation from the sample passes. As discussed above, Reiley fails to disclose or suggest such an element and Scheiner does not make up for this deficiency. Moreover, Kuni does not make up for this deficiency. Thus, Claims 11 and 12 are patentable over the cited art for at least the reasons discussed above.

Claim 16 depends from Claim 13 and is patentable for at least the same reasons as Claim 13.

Regarding Claims 27 and 28, as discussed above, Wack should be removed as prior art. Moreover, Claim 28 recites a single "polarizing element" through which the radiation passes through "toward said sample" and through which the reflected radiation from the sample passes. As discussed above Wack, Reiley and Scheiner alone or in combination fail to disclose or suggest this. Moreover, Kuni fails to make up for this deficiency. Accordingly, Claims 27 and 28 are allowable over the cited references.

In addition, Applicant's records indicate that the Examiner has not initialed and returned the PTO-Form 1449s that were submitted in Supplemental Information Disclosure Statements on February 27, 2002; January 30, 2002; and January 3, 2002. Applicants respectfully request that the Examiner initial and return said forms with the next action.

Claim 7 has been amended and Claims 3-16, 27, and 28 are pending. For the above reasons, Applicants respectfully request allowance of Claims 3-16, 27, and 28. Should the Examiner have any questions concerning this response, the Examiner is invited to call the undersigned at (408) 982-8202.

Via Express Mail Label No.
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